AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1   1.   (Currently amended) A method for protecting an item of private
2   information in a database, wherein the item of private information is used as a key
3   for retrieving data from the database, wherein the method comprises:
4   receiving the item of private information;
5   creating a hash of the item of private information at a database; and
6   storing the hash of the item of private information in a-the database.

1   2.   (Currently Amended) The method of claim 1, wherein creating the
2   hash can include creating at least one of a Secure Hash Algorithm-1 (SHA-1) or
3   and a Message-Digest algorithm 5 (MD5) hash.

1   3.   (Original) The method of claim 1, wherein the hash of the item of
2   private information is created by the database in a manner that is transparent to an
3   application which manipulates the private information.

1   4.   (Original) The method of claim 1, wherein processing a query
2   containing the private information involves:
3   receiving the item of private information;
4   creating a hash of the item of private information; and
5   querying the database using the hash of the item of private information.

1   5.   (Original) The method of claim 1, wherein the item of private

2   information can include one of:

3   a social security number;

4   a driver's license number;

5   a passport number;

6   an email address;

7   a person's name; and

8   a person's mother's maiden name.

1   6.   (Original) The method of claim 1, wherein multiple items of

2   private information can be combined prior to creating the hash.

1   7.   (Currently Amended) The method of claim 1, wherein creating the

2   hash further comprises checking a column attribute in the database to ~~see~~

3   <u>determine if</u>~~that~~ "privacy" is enabled, and ~~if so~~<u>only upon privacy being enabled,</u>

4   creating the hash.

1   8.   (Original) The method of claim 1, wherein the database is a

2   Lightweight Directory Access Protocol (LDAP) database.

1   9.   (Currently Amended) A computer-readable storage medium storing

2   instructions that when executed by a computer cause the computer to perform a

3   method for protecting an item of private information in a database, wherein the

4   item of private information is used as a key for retrieving data from the database,

5   wherein the method comprises:

6   receiving the item of private information;

7   creating a hash of the item of private information<u> at a database</u>; and

8   storing the hash of the item of private information in <u>the</u> ~~a~~ database.

1   10.   (Currently Amended) The computer-readable storage medium of

2   claim 9, wherein creating the hash can include creating at least one of a Secure

3   Hash Algorithm-1 (SHA-1) or and a Message-Digest algorithm 5 (MD5) hash

1   11.   (Original) The computer-readable storage medium of claim 9,

2   wherein the hash of the item of private information is created by the database in a

3   manner that is transparent to an application which manipulates the private

4   information.

1   12.   (Original) The computer-readable storage medium of claim 9,

2   wherein processing a query containing the private information involves:

3   receiving the item of private information;

4   creating a hash of the item of private information; and

5   querying the database using the hash of the item of private information.

1   13.   (Original) The computer-readable storage medium of claim 9,

2   wherein the item of private information can include one of:

3   a social security number;

4   a driver's license number;

5   a passport number;

6   an email address;

7   a person's name; and

8   a person's mother's maiden name.

1   14.   (Original) The computer-readable storage medium of claim 9,

2   wherein multiple items of private information can be combined prior to creating

3   the hash.

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1   15.   (Currently Amended) The computer-readable storage medium of

2   claim 9, wherein creating the hash further comprises checking a column attribute

3   in the database to ~~see~~ determine ~~if~~ that "privacy" is enabled, and only upon

4   privacy being enabled. ~~if so~~ creating the hash.

1   16.   (Original) The computer-readable storage medium of claim 9,

2   wherein the database is a Lightweight Directory Access Protocol (LDAP)

3   database.

1   17.   (Currently Amended) An apparatus for protecting an item of

2   private information in a database, wherein the item of private information is used

3   as a key for retrieving data from the database, comprising:

4   a receiving mechanism configured to receive the item of private

5   information;

6   a hashing mechanism configured to create a hash of the item of private

7   information at a database; and

8   a storage mechanism configured to store the hash of the item of private

9   information in the ~~a~~ database.

1   18.   (Currently Amended) The apparatus of claim 17, wherein the

2   hashing mechanism is configured to use at least one of a Secure Hash Algorithm-1

3   (SHA-1) ~~or~~ and a Message-Digest algorithm 5 (MD5) hashing functions.

1   19.   (Original) The apparatus of claim 17, wherein the hashing

2   mechanism is internal to the database and is transparent to an application which

3   manipulates the private information.

1   20.   (Original) The apparatus of claim 17, further comprising a query

2 mechanism configured to perform queries containing the private information,

3 wherein the query mechanism is configured to:

4   receive the item of private information;

5   create a hash of the item of private information; and to

6   query the database using the hash of the item of private information.

1   21.   (Original) The apparatus of claim 17, wherein the item of private

2 information can include one of:

3   a social security number;

4   a driver's license number;

5   a passport number;

6   an email address;

7   a person's name; and

8   a person's mother's maiden name.

1   22.   (Original) The apparatus of claim 17, wherein the hashing

2 mechanism can be further configured to combine multiple items of private

3 information prior to creating the hash.

1   23.   (Currently Amended) The apparatus of claim 17, wherein the

2 hashing mechanism is further configured to check a column attribute in the

3 database to determine see if that "privacy" is enabled, and only upon privacy

4 being enabledif so, to create the hash of the private information.

1   24.   (Original) The apparatus of claim 17, wherein the database is a

2 Lightweight Directory Access Protocol (LDAP) database.

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